

CLAIM AMENDMENTS

The following listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A building panel configured to be a load-bearing panel of a self-supporting building structure, the building panel comprising:

(a) a curved central portion having a curved shape in cross section perpendicular to a longitudinal direction along a length of the building panel, the curved central portion having transverse corrugations therein;

(b) a pair of side wall portions extending from opposite ends of said curved central portion in cross section, said curved central portion being concave-shaped in cross section from a perspective between said side wall portions, wherein said sidewall portions comprise straight portions that extend tangentially in cross section from the concave-shaped curved central portion;

(c) a pair of complementary wing portions extending from said side wall portions, and

(d) wherein said building panel is curved in the longitudinal direction; and

(e) wherein said building panel is formed from sheet material and configured to mate with adjacent building panels so as to form a load-bearing panel of a self-supporting building structure.

2. (Canceled).

3. (Previously Presented) The building panel of Claim 1, wherein said curved central portion comprises an arc.

4. (Original) The building panel of Claim 3, wherein said arc ranges from 15° to 130°.

5. (Original) The building panel of Claim 3, wherein said arc ranges from 40° to 130°.

6. (Original) The building panel of Claim 5, wherein said arc ranges from 60° to 120°.

7. (Original) The building panel of Claim 6, wherein said arc is 85°.
8. (Original) The building panel of Claim 3, wherein said arc has a radius ranging from 4 inches to 25 inches.
9. (Original) The building panel of Claim 3, wherein said arc has a radius ranging from 4 inches to 12 inches.
10. (Original) The building panel of Claim 9, wherein said radius ranges from 5 inches to 8 inches.
11. (Original) The building panel of Claim 9, wherein said radius is 6 inches.
12. (Previously Presented) The building panel of Claim 1, wherein said side wall portions extend at an incline from said opposite ends of said curved central portion.
13. (Canceled).
14. (Original) The building panel of Claim 1, wherein one of said wing portions comprises a hook portion and the other of said wing portions comprises a hem portion.
15. (Currently Amended) A self-supporting building structure, comprising a plurality of interconnected panels configured to be a load-bearing wall of the self-supporting building structure, one or more of said panels comprising:
 - (a) a curved central portion having a curved shape in cross section perpendicular to a longitudinal direction along a length of the building panel, the curved central portion having transverse corrugations therein;
 - (b) a pair of side wall portions extending from opposite ends of said curved central portion in cross section, said curved central portion being concave-shaped in cross section from a perspective between said side wall portions, wherein said side wall portions comprise straight portions that extend tangentially in cross section from the concave-shaped curved central portion; **and**

(c) a pair of wing portions extending from said side wall portions, wherein one wing portion extends from a first of said side wall portions and the other wing portion extends from a second of said side wall portions, wherein said one wing portion from a first of said panels is connected to said other wing portion from a second of said panels, and

(d) wherein each of the one or more panels is curved in the longitudinal direction; and

(e) wherein each of the one or more panels are formed from sheet material and configured to mate with adjacent building panels so as to form a load-bearing wall of a self-supporting building structure.

16. (Canceled).

17. (Previously Presented) The building structure of Claim 15, wherein said curved central portion comprises an arc.

18. (Original) The building structure of Claim 17, wherein said arc ranges from 15° to 130° .

19. (Currently amended) The building panel structure of Claim 17, wherein said arc has a radius ranging from 4 inches to 25 inches.

20. (Original) The building structure of Claim 15, wherein said one wing portion comprises a hook portion and said other wing portion comprises a complementary hem portion such that said hook and hem portions interconnect.

21-27. (Canceled).

28. (Previously Presented) The building structure of Claim 15, wherein said side wall portions extend at an incline from said opposite ends of said curved central portion.

29. (Previously Presented) The building structure of Claim 15, wherein said central portion is without a longitudinal stiffening notch.

30. (Previously Presented) The building panel of Claim 1, wherein said central portion is without a longitudinal stiffening notch.

31. (Canceled)

32. (Canceled)

33. (Previously presented) The building panel of Claim 1, wherein the curved central portion is curved in cross section over an entire width of the curved central portion.

34. (Previously presented) The building structure of Claim 15, wherein the curved central portion is curved in cross section over an entire width of the curved central portion.